











"The care of injured patients requires a system approach to ensure optimal care . . . however, no one trauma center can do everything alone."

Resources for Optimal Care of the Injured Patient 2014

Case 1

- 13 year old male skier
- Tree strike
- Field: BP 150/95, HR 105, RR 40, GCS 6
- · Level 3 trauma center
- BP 165/75, HR 109, RR 28, GCS 10
- Intubated by CRNA

Case 1

- Injuries:
 - Bilateral pneumothoraces
 - Left rib fractures
 - Multifocal cerebral hemorrhages
 - Left orbital fracture
 - Intimal tear of the descending aorta

Case 1

- Normal transfer receiving hospital
 - Level 2
 - 65 miles away
 - Not pediatric center
- Transferred to Level 1 trauma center, 310 miles away
- Endovascular repair, TBI minimal

Case 2

- 12 yo male soccer player
- · Kick to the left flank
- ED BP 130/80, HR 95
- · Abdomen tender
- CT abdomen



Case 2

- BP 80/40, HR 120
- Blood infusing
- UCDMC Transfer Center
 - 37 miles away
- Surgeon instructed to do splenectomy
- Transfer to UCDMC for postop pediatric care

Case 3

- 28 year old female
- · GSW right upper arm, head
 - Field GCS 14
- Level 3 trauma center
 - GCS 14
 - GSW RUE no bleeding, neurovascular intact
 - GSW under right chin up side of face
 - Right mandible fracture, right frontal skull fracture, right globe rupture

Case 3

- Transferred 26 miles south to Level 2 trauma center
- Evaluated by NRS
- Transferred 75 miles north to Level 1 trauma center for globe rupture

Case 4

- 15 year old male GSW right ear entrance, exit right eye
- GCS 7
- · Level 3 trauma center
 - GCS 7
 - CT:
 - SAH
 - · Medial and lateral orbit fractures
 - Globe rupture

Case 4

- Transferred 26 miles south to Level 2 trauma center
- Evaluated by NRS
- Transferred 75 miles north to Level 1 trauma center for globe rupture
- Day of transfer craniotomy, repair of eye injuries
- 11 days later enucleation

Case 5

- 55 yo male tractor driver, struck by vehicle, ejected
- Field GCS 3, scene time for HEMS 9 minutes
- · Level 3 trauma center
 - GCS 3
 - Fractures of acetabulum, lumbar spine, femur
 - Flail chest, pulmonary contusion
 - SAH

Case 5

- Plan for air transfer to Level 1 trauma center
- Air transport provider (same as scene)

Call received 22:28
 Dispatch call 22:33
 En route 22:47
 Arrival 22:55
 Patient contact 23:02

Departure 23:46 44 minutes

Case 5

- Points
 - Air dispatcher should let requesting facility know the ETA
 - ED to ED trauma transfers should be considered "scene" transports, not IFT
 - Emergency physicians should be aware of these delays and may need to make an air vs. ground transport decision

Case 6

- 37 year old male, assault to face
- GCS 15
- Seen at Level 3 trauma center
 - Orbital floor fracture
 - Tiny SAH
- Transfer to Level 1 trauma center with facial and neurosurgical capabilities
- 167 miles by ambulance
- 129 miles helipad to helipad

Case 6

- · Level 1 center
 - Radiology and NRS re-read of brain CT
 - No bleed
 - ENT evaluation nonoperative fractures
- Plan: go home

Case 6

"Nighthawk"
Telemedicine

